## Rec'd PCT/PTO 0 7 T 2004

10/510664

## **CLAIMS**

- 1. An aggregate storing and classifying mechanism for production of asphalt in plants, said mechanism having a closed form structure and comprising a body (2), a screen (3) arranged to the upper side of said body, a plurality of foot means (1) for holding said body (2), a plurality of discharge mouths (4) and discharge covers (8) for discharging the aggregate material from said body (2) and feeding the aggregate material to conveyors placed under said body (2) through plurality of discharging axis, a paddle box (12), said mechanism being associated with an elevator for conveying the aggregate material provided by a secondary crusher to said screen (3), said body (2) comprising a plurality of sections (6) arranged in said body (2) for storing aggregate material of different gradation levels; corridor means (7) and channel means (15) arranged in said body (2) for distributing the aggregate in said body (2) homogenously.
- 2. The mechanism of claim 1 wherein the elevator is in closed form as the aggregate storing and classifying mechanism.
- **3.** The mechanism of claim 2 wherein the elevator is a vertical elevator and is associated with a filter system for sucking dust volume of the elevator.
- **4.** The mechanism of claim 1 wherein the secondary crusher is covered by the paddle box (12).
- **5.** The mechanism of claim 1 wherein the screen (3) is a vibrating screen and the upper side thereof is covered.
- **6.** The mechanism of claim 1 further comprising pistons (11) operable by mechanically or electronically are provided for opening and closing said discharge covers (8).
- 7. The mechanism of claim 1 further comprising dust suction piper (13) and wherein said paddle box (12) and said dust suction pipes (13) are provided for sucking the dust originated in said screen (3), in the crusher and in said body.

- **8.** The mechanism of claim 1 wherein said corridor means (7) and said channel means (15) are provided horizontally so that said plurality of sections (6) are united to form a single storing section.
- 9. A method for storing and classifying of aggregate comprising the steps of:
  - crushing of ballast material in the crusher which is covered with the paddle box (12) and connected to a filter system for the absorption of dust,
  - controlled crushing through which aggregate flow rate, flow speed, gradations and the amount of each gradation are managed with modifications made on the revolution speed of the secondary crusher,
  - transferring of aggregate material to the closed vertical elevator which is connected to filter system for the absorption of dust,
  - transferring of aggregates in a vertical position with the vertical elevator to screens (3) of the mechanism,
  - sieving of aggregate material with screens (3) which are covered with the paddle box and connected to a filter system for the absorption of dust,
  - directing the flow of aggregates towards inside the mechanism using directing parts and delivering aggregates into storing sections with respect to their gradations.
  - storing of more than one size (gradation) of aggregates in a completely closed system,
  - storing of more than one size (gradation) of aggregates by changing (either increasing or decreasing) their quantity when it is required,
  - absorbing and storing of dust particles which form after secondary crushing without causing them to spread to the environment,

- direct discharging or discharging through feeding system (mule system) of deposited materials from discharge mouths (4) either manually or by automatic control,
- placing of horizontal conveyor bands which can make aggregate transfer in more than one axis under the mechanism,
- placing plurality of discharge mouths (4) along with the same axis for enabling feeding of two separate asphalt plants situated at two different directions.